

REMARKS

Favorable reconsideration of the application is respectfully requested in light of the amendments and remarks herein.

Upon entry of this amendment, claims 1-26 are pending. By this amendment, claims 1, 3-4, 6-7, 9-12, 14-16, and 19-21 have been amended. No new matter has been added.

Objection to Claim 9

On page 2 of the August 20, 2005 Office Action ("the Office Action"), claim 9 stands objected to for informalities. Claim 9 has been amended to overcome the objection.

§103 Rejection of Claims 1-4, 7-21, and 24-25

On page 2 of the Office Action, claims 1-4, 7-21, and 24-25 stand rejected under 35 U.S.C. §102(b) as being anticipated by Blumenau (U.S. Patent No. 5,664,216).

In the Background section of the Specification, it is stated:

One of the challenges in matching audio and video is the need to adjust the tempo of the audio as to have it coincide with the video or other audio. For example, when a video scene changes from a slow moving pastoral scene to a series of action shots, a video producer or composer may want the style and tempo of the music to reflect this change. Arranging the music such that the downbeat (i.e., the strongest beat in a measure of music) of the musical phrase is synchronized with a change in scene can emphasize or complement the video, making for a better experience for the viewer. Nevertheless, computer programs have not heretofore provided for the adjustment of tempo to match audio and video or other audio. ... there is a need to synchronize audio and video changes such that music changes with the accompanying video in a way that makes sense visually and audibly. Further, there is a need to determine the tempo of a portion of music such that one phrase ends and another begins at a frame of video or portion of audio that the producer or composer wants to emphasize or complement. Even further, there is a need to automate the

process of calculating and creating a musical tempo map to facilitate the synchronization of audio to video or other audio.”

Background of the Specification, Page 2, paragraphs [0005] and [0006].

Therefore, the Background highlights the need not just to adjust the tempo of the audio but to adjust the tempo so as to have it coincide with the video or other audio, such as when a video scene changes.

To achieve the above-stated objective, embodiments of the present invention provide method, systems, and GUI to adjust the tempo. For example, the method of adjusting tempo of a first audio recording to match a first set of audio events to a video or second set of audio events in an audio-visual recording, as recited in claim 1, includes:

adjusting the tempo of at least a portion of the first audio recording to fit the first audio recording to a section of a video or second audio recording having said video or second set of audio events marked by the reference

receiving a reference indicating a location in a recorded signal, the reference being indicative of a desired audio tempo change location in the recorded signal;

providing a tempo for the first audio recording having said first set of audio events to be at least partially included in the recorded signal; and

adjusting the tempo of at least a portion of the first audio recording to match the first audio recording to a section of a video or second audio recording having said video or second set of audio events marked by the reference.

(emphasis added)

Accordingly, in one aspect of claim 1, the method includes receiving a reference indicating a location of a desired audio tempo change in a recorded signal, and adjusting the tempo of at least a portion of the first audio recording to match the first audio recording to a

section of a video or second audio recording having the video or second set of audio events marked by the reference.

These limitations are included in sections of the Specification describing Figures 4 and 5.

[0035] FIGURE 4 illustrates display 300 where audio tempo has been adjusted based on location marker 370 in audio files 324 and 326. The tempo adjustment aligns time 7.007 seconds (cursor 374) with location marker 370 (e.g., measure 5, beat 1, 0 ticks) due to tempo being set at 137.005 beats per minute (BPM).

...

[0037] Interacting with display 500, a person or user can provide a time marker 570 at a particular time location of video or audio (e.g., time 7.007 seconds or frame 210 of video). Then, the user can hold a key or some computer input and drag time marker 570 to a location 574 (e.g., measure 5, beat 1, 0 ticks) in the audio file to which the audio file is to be synchronized. In an exemplary embodiment, the computer has a snap option which assists a user by permitting a dragged item to only be dropped or located on a downbeat of the audio file.

Specification, paragraphs [0035] and [0037], emphasis added.

Thus, the Specification clearly indicates that the tempo of an audio recording segment is adjusted to match the audio recording segment to video or another audio recording segment marked by the reference, for example, by dragging the time marker 570 to a location 574 (e.g., measure 5, beat 1, 0 ticks) in the audio file to which the audio file is to be synchronized. That is, in practice, the tempo is adjusted by stretching/compressing the length of the audio waveform marked by the reference marker so that the tempo and timing of an audio recording matches a video or another audio recording having video or other audio events (e.g., scene changes).

By contrast, although the Office Action states that Blumenau teaches “the tempo being adjusted to match the audio recording to a section of the recorded signal marked by the reference (taught as the specification of the tempo filter over a period of time or frame, at col. 7, line 65 through col. 8, line 2)”, Blumenau fails to teach or suggest adjusting the tempo of an audio

recording segment to match the audio recording segment to video or another audio recording segment marked by the reference as described above for an example illustrated in Applicant's Figures 4 and 5. That is, even assuming that Blumenau teaches filtering a marked section for a tempo adjustment, Blumenau fails to teach a claimed limitation of adjusting the tempo to match an audio recording segment to video or another audio recording segment marked by the reference such as by stretching/compressing the length of the audio waveform marked by the reference marker so that the tempo and timing of an audio recording matches video or other audio events (e.g., a scene change). Further, although the Office Action (on page 9) states that Samra teaches increasing the length and duration of an audio waveform at col. 10, lines 38-42 of Samra, this passage of Samra seems to indicate that increasing of the length and duration of an audio waveform is achieved by looping the clips for continuous playback rather than adjusting the tempo to match the audio recording to a section of the recorded signal marked by the reference (e.g., by stretching as illustrated in Figures 4 and 5).

Based on the foregoing discussion, claim 1 should be allowable over Blumenau. Independent claims 10, 15, and 21 closely parallel claim 1 and recite substantially similar limitations as recited in independent claim 1. Therefore claims 10, 15, and 21 should also be allowable over Blumenau. Since claims 2-4, 7-9, 11-14, 16-20, and 24-25 depend from one of claims 1, 10, 15, and 21, claims 2-4, 7-9, 11-14, 16-20, and 24-25 should also be allowable over Blumenau.

In addition, amended independent claim 21 now recites "a **graphical** reference marker which is configured to be selectively located by a user, the graphical reference marker being moved to adjust the tempo of at least a portion of the first audio recording". (emphasis added) Blumenau does not disclose or suggest such a "graphical reference marker" that a user can

selectively locate so as to adjust tempo of an audio recording.

Accordingly, it is submitted that the rejection of claims 1-4, 7-21, and 24-25 based upon 35 U.S.C. §102(b) has been overcome by the present remarks and withdrawal thereof is respectfully requested.

§103 Rejection of Claims 22, 23, and 26

On page 7 of the Office Action, claims 22, 23, and 26 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Blumenau. This rejection is respectfully traversed.

Based on the foregoing discussion regarding independent claim 21, and since claims 22, 23, and 26 depend from claim 21, claims 22, 23, and 26 should be allowable over Blumenau.

Accordingly, it is submitted that the rejection of claims 22, 23, and 26 based upon 35 U.S.C. §103(a) has been overcome by the present remarks and withdrawal thereof is respectfully requested.

§103 Rejection of Claims 5 and 6

On page 9 of the Office Action, claims 5 and 6 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Blumenau and Samra (U.S. Patent No. 6,897,880). This rejection is respectfully traversed.

Based on the foregoing discussion regarding claim 1, and since claims 5 and 6 depend from claim 1, claims 5 and 6 should be allowable over Blumenau. Samra is merely cited for teaching that “clips can be looped for continuous playback.” *Samra, col. 10, lines 41-42.*

Therefore, Blumenau and Samra, individually or in combination, fail to teach or suggest all the limitations of claims 5 and 6.

Accordingly, it is submitted that the rejection of claims 5 and 6 based upon 35 U.S.C. §103(a) has been overcome by the present remarks and withdrawal thereof is respectfully requested.

CONCLUSION

In view of the foregoing, entry of this amendment, and the allowance of this application with claims 1-26 is respectfully solicited.

In regard to the claims amended herein and throughout the prosecution of this application, it is submitted that these claims, as originally presented, are patentably distinct over the prior art of record, and that these claims were in full compliance with the requirements of 35 U.S.C. §112. Changes to these claims, as presented herein, are not made for the purpose of patentability within the meaning of 35 U.S.C. §§101, 102, 103 or 112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicants are entitled.

In the event that additional cooperation in this case may be helpful to complete its prosecution, the Examiner is cordially invited to contact Applicants' representative at the telephone number written below.


The Commissioner is hereby authorized to charge any insufficient fees or credit any overpayment associated with the above-identified application to Deposit Account 50-0320.

PATENT
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Respectfully submitted,

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